7 • ECONOMIC DEVELOPMENT

The second goal for this water management plan is to, "integrate economic development with water-related programs and watershed restoration efforts."

The quality of life in Orange County, as symbolized by the coastline, Newport Bay and canyons, attracts national and international business, tourists and homebuyers. We have a vested interest in maintaining and improving water resources in a way that fosters a healthy local economy. The Orange County Business Council openly calls for action to address the crisis in the state's water infrastructure and has set up an online resource center (www.ocbc.org/water) to highlight broad support from the business community for a comprehensive solution.

Rather than view environmental regulatory compliance and the idea of a sustainable environment as obstacles to economic development, watershed planning opens up new opportunities to infuse capital into the economy, find efficient and effective ways to address environmental issues, create a more balanced watershed hydrology, reduce operations and maintenance costs, encourage development of green industries in our Region and improve resource attractiveness to the community, business and tourists.

A number of major cities are now embracing sustainable development through river restoration and revitalization, LEED building certification, transportation oriented developments (TODs), green roofs, low impact design and other techniques. The City of Toronto, Canada has implemented a waterfront revitalization program, which is currently redesigning the city's edge along Lake Ontario to embrace and support the lake as both an ecological and urban amenity. Chattanooga and Pittsburg have used river restoration as an anchor for surrounding urban revitalization. Chicago is developing a reputation as a "green" city because of local government efforts to better integrate the city with its local ecosystem. Portland, Oregon is considered by many to be the most advanced city in the United States in terms of becoming sustainable, especially in regard to innovative stormwater management. All of these places provide examples of how to blend economic development and environmental health.

This trend is increasingly supported, and even required, by the State of California. In 2007, the State won a lawsuit against the County of San Bernardino for inadequately addressing the cumulative environmental impacts of the growth outlined in their new General Plan. Specifically, the County was found to have inadequately accounted for climate change impacts that would occur under its approved plan for allowable growth. This lawsuit made it clear

Figure 7.1 Portland, Oregon
(Source: portlandonline.com, explorethepearl.com)

that it will only get more difficult for municipalities to plan for economic development that is counter-productive to environmental goals and responsibilities. Therefore, communities will need to look for innovative ways to develop their local economy in an environmentally sustainable way. This chapter outlines preliminary Regional Performance Objectives for doing that.

7.1 Real Estate Regional

Performance Objectives

From a local government's perspective, land use and planning is very much tied to economic development. This is because economic development is largely achieved through real estate development projects. Development fuels the local economy by creating more places for people to live and work and by attracting employers, which in turn supply jobs for the new residents. These residents need to shop, which in turn attracts new retail businesses, creating greater sales tax revenues for the municipality. The municipality can then afford to build more infrastructure and provide more services to the community. While the economic advantages of incorporating healthy ecological amenities into a community are easy to understand (e.g., long-term cost savings associated with sustainability, increased property values associated with natural greenbelts, avoiding fines or costs for pollution cleanup, ensuring adequate water supplies), the additional upfront costs are often a hurdle to making important real estate deals work. However, the public sector has an interest in incentivizing sustainable land use because it stands to save millions, sometimes billions, of dollars in infrastructure and regulatory costs.

There are emerging examples of sustainable development in this Region. For example, The Irvine Company has implemented a large native plant restoration program in concert with its residential developments in Newport Coast, including replanting the Pelican Hill Golf Course with more water-thrifty turf in the fairways. The Irvine Company is also constructing an underground cistern as part

of its Pelican Hill Resort that will capture flow from a five–year storm event and reuse it to irrigate a golf course. On a larger scale, Heritage Fields El Toro, LLC (including Lennar Corporation) is planning green residential and commercial developments on the former El Toro Marine Corps Air Station that will complement the substantial restoration efforts planned for the future Great Park. The City of Newport Beach has won awards for its new General Plan, which makes a point of emphasizing its conservation element and integrating sustainability concepts into its Land Use element.

The proposed Regional Performance Objective addressing economic development for real estate is for each agency, as part of its general plan, to draft planning policies by 2012 that address hydrologic, water supply and habitat needs. Suggestions with regard to drainage, land use planning and pilot projects are discussed in the following sections.

The following sections list strategies that could be considered as kernel ideas for Regional Performance Objectives for sustainable land use and real estate development in the Region.

7.1.1 Site Drainage

- Capture and reuse the first flush of stormwater on site. Runoff can be directed to rain gardens. Placed at a low point on the site, they contain plants that can live primarily on seasonal precipitation, imitating what happens in natural systems. As such plants become established, they need little or no dry weather irrigation. Cisterns provide the opportunity to reuse water on site, reducing the utility costs for the owner.
- Reduce or eliminate irrigation runoff by incorporating an attractive native or drought tolerant landscape.

7.1.2 Land Use Planning

- Reduce or eliminate irrigation needs with non-invasive drought tolerant landscape.
- Create riparian overlay zones and conservation easements for possible future stream daylighting.
- Manage open space as native habitat and/or for runoff capture.
- Develop a mitigation implementation and management plan for the Region.
- Map areas of important hydrologic function in a publicly accessible GIS database.
- Identify supplemental funding for private projects that serve regionally significant hydrologic purposes.
- Develop tax & permitting incentives & design support to implement sustainable development projects. For example, the City of Newport Beach has a two-year program to provide free weather-based “smartt” irrigation controllers for property owners in the Newport Coast area, where excess irrigation runoff sends pollutant loads into coastal canyons that drain to an Area of Special Biological Significance.
- Design projects to create, as much as possible, a long-term self-

Figure 7.2 Landscapes with drought-tolerant California native plants, Los Angeles, Alta Loma , Pasadena

sustaining natural system, thus minimizing maintenance needs.

- Develop infill areas with low impact development practices (LID).
- Develop brownfields with low impact development practices (LID).
- Conduct an educational/networking workshop series with cities, developers, Caltrans, Urban Land Institute, U.S. Green Building Council. These would expand upon the existing yearly County Stormwater Management Program workshops with city planners.

7.1.3 Pilot Projects

- Institute urban revitalization pilot projects. These demonstration projects can serve as models for the financing and underwriting of sustainable development in the Region by providing comparison examples for the assessment of risk This kind of financial analysis partly determines developers' cost of borrowing money, which in turn determines the kinds of things they will be able to do in their projects.
- Organize a Newport Bay Watershed Stakeholder Regional

Committee for urban planning, economic development & ecosystem interests in order to facilitate pilot land use projects.

- Develop a pilot concept land use plan for one riparian overlay zone within each city to implement IRCWMP objectives.

7.2 Business Regional

Performance Objectives

Real estate (land use) is one element of economic development. Another is business. In his book Local Economic Development and the Environment (2002), David Gibbs states that, in order for an area to move toward an environmentally sustainable local economy, businesses need to address four broad principles:

1. Consideration of the environment, future generations, public participation and equity
2. Diversification of the local economy
3. Increasing local self-sufficiency
4. A focus on spatial integration (place-based), rather than functional integration (process-based)

Gibbs outlines a wide range of implementation strategies for realizing these principles. He states that an economy is a complex system that requires dynamic and equally complex policies and programs in order to facilitate change. Therefore, rather than using these strategies in isolation, it is most effective to use them in combination as a 'portfolio of instruments' each of which will be effective in different circumstances. He identifies strategies for community, business and government that serve as the basis for this Plan's proposed Regional Performance Objectives for local businesses.

The proposed Regional Performance Objective addressing economic development for business is for each agency to draft planning policies by 2012 that address economic, hydrologic and habitat needs, as part of its General Plan.

Suggestions with regard to the workforce, industry and government are discussed in the following sections.

7.2.1 Workforce

- Increase training in watershed sciences - see education & outreach.
- Improve access to capital for disadvantaged communities, through methods such as Miocean Foundation, venture capitalists, microfinance, neighborhood projects.

7.2.2 Industry

- Provide guidance for businesses in sustainable practices via workshops and training.
- Reuse waste by using it as part of another local business's supply chain: An example might be an Internet-based clearinghouse for local material reuse.
- Incentivize development of renewable technologies.

- Conduct a study to monetize the value of environmental services over the long term to determine economic value.
- Conduct a study to anticipate potential liabilities due to more rigorous future legislation.
- Ensure that water supply is adequate and reliable. Increase recycled water use, supply and infrastructure.
- Ensure 100-year flood protection.
- Clarify funding and permitting requirements and schedules regarding hydrological and habitat needs.

7.2.3 Government

- Prepare design guidelines for incorporating 'green thinking' into eco-system projects.
- Provide training for urban planners regarding watershed considerations that could be included in a General Plan. Provide supplemental training to urban planners to increase understanding of specific regulations so that environmental resource needs, mitigation and compliance can be built into general plans.
- Create tax incentives to redevelop brownfields and derelict land
- Evaluate water and resource efficiencies in county and city in-house practices
- Promote watershed programs through General Plans: :

7.3 Transportation System Regional Performance Objectives

The proposed Regional Performance Objective addressing economic development of transportation systems is for each agency to draft planning policies by 2012 that address transportation, hydrologic and habitat needs as part of its General Plan.

Suggestions with regard to transportation diversification, business clusters and 'green streets' are listed below.

7.3.1 Diversify Transportation and Connect Business Clusters

- Institute transportation planning to examine expanding the existing transportation system to support developing strategic business areas. Businesses fare better when they are a part of a critical mass of activity. Conversely, interaction decreases when businesses and customers are spread out over a widely diffused area. Business area clustering can also reduce the need for lower density development elsewhere, and make alternative forms of transportation, such as light rail, bike paths and walking trails, more viable.
- Increase business area mixed-use clustering and transportation oriented developments.

- Increase mass transit options and efficiency; connect with urban development hubs.
- Increase the number of Class 1 bikeways.
- Increase the number of urban park-school-trail connections.

7.3.2 Green Streets

Given that roads generally account for 30 percent to 60 percent of the total impermeable surface of urban areas (Rodrigue, 2005), consider if new and retrofit transportation projects can use the Sustainable Travelways or "Green Streets" design approach, as proposed for the Great Park. These guidelines for capturing and treating road runoff on-site include:

- Enhanced tree canopy
- Low volume irrigation
- Permeable pavements and surfaces
- Use of recycled materials
- Integrated runoff treatment, including swales and planters
- Conservation-oriented planting palettes
- Structured soil preparation
- Reflective color/light values
- Integrated transit or neighborhood electric vehicle (NEV) travelways
- Alternative lighting
- Traffic calming features
- Reduced pavement widths
- Road runoff captured and treated according Green Streets / Sustainable Travelways guidelines, or LEED guidelines

7.4 Operations & Maintenance Regional Performance Objectives

The proposed Regional Performance Objective for Operations and Maintenance is to create an umbrella group(s) by 2010 to oversee and facilitate funding for long-term maintenance and operation of all open spaces and water resources infrastructure.

- Create a template for maintenance & operations funding agreements.
- Projects will be required to:
- include a maintenance plan and an agency or stakeholder that will assume responsibility.
- leverage the laws of nature to minimize maintenance needs. A balanced natural system is self maintaining.

References

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